

PCT

## ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/049,407

DATE: 02/27/2002 TIME: 13:23:41

Input Set : A:\Mwh0006.app

Output Set: N:\CRF3\02272002\J049407.raw

```
3 <110> APPLICANT: Denton, R. Rex
             Kliem, Stefanie
             Nandabalan, Krishnan
     5
             Stephens, J. Claiborne
      6
      8 <120> TITLE OF INVENTION: DRUG TARGET ISOGENES: POLYMORPHISMS IN THE
             5-HYDROXYTRYPTAMINE RECEPTOR 1A GENE
     11 <130> FILE REFERENCE: MWH-0006US HTR1A
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/049,407
     14 <141> CURRENT FILING DATE: 2002-02-06
     16 <150> PRIOR APPLICATION NUMBER: PCT/US00/40519
     17 <151> PRIOR FILING DATE: 2000-08-06
     19 <150> PRIOR APPLICATION NUMBER: 60/147,711
     20 <151> PRIOR FILING DATE: 1999-08-06
     22 <160> NUMBER OF SEQ ID NOS: 53
     24 <170> SOFTWARE: PatentIn Ver. 2.1
     26 <210> SEQ ID NO: 1
     27 <211> LENGTH: 1204
     28 <212> TYPE: DNA
     29 <213> ORGANISM: Homo sapiens
     31 <400> SEQUENCE: 1
     32 attotecetg agggagtaag getggaetgt tagatgatag eggaggtaee gttttgttgt 60
     33 tgttgtcgtc gttgttcgtt tgtttttgga gacggagtct cgctctgtcg cccaggctgg 120
     34 agtgcaatgg cgcgagaacg gaggtagett tttaaaaacg aagacacact cggtettett 180
     35 ccatcaatta gcaataattg ggagactgac ccaggactgt tcaccttccc attcaggctc 240
     36 cctatgcttc cttttctcat ctcctattgc cactctggga tgctgacacg atttaagaat 300
     37 ttggcagata atatgaccca aggagtagtt ggaattccct cccccaagtt tttccaaccc 360
     38 cagttttgct gggttggagg cggagtttat ttgttacaac cttggtctga ccggcaggga 420
     39 cctggtgtgt gtaagtgagt tctgagtctc tgttgacaaa aagagactcg aatgcaaaga 480
     40 cgctgagcta gagggagagg agggcgggga cccagaggaa agaggcactc ctcggggttg 540
     41 gggaagtatt aggaggggag ggttagagtg ggagggaagg agctcgcttt cgaagcgact 600
     42 cacagaggga taaataaagg gaagtgagga ggaagaggga gacttaaagg gaaggcaggt 660
     43 ggggagaagg gggacgaaag aggcagaaga gagagaagag aggaggagag 720
     44 agggaaggaa ggaaatagcg agaggaggt cacagagtga ccgtggagga tggggcttct 780
     45 cggttctaga tatttctgtg attggagact gtttgctagt ggggagactc cagctccggc 840
     46 agccagttcg ggagcggcaa agtaaaatgg acagcgacag acagacgttc cagccacctc 900
     47 tecgeegeeg ggagateetg gagetgettt eaggeeaact eeagttteee agetggaget 960
     48 totgaacgeg otggactgeg agageceagg gagegeetga aagetgetee teggagatae 1020
     49 ccttcgccga agcagtaaga acttcctgct tgggtctctg cattcccttc ctccgaaact 1080
     50 teccaggaga agggeggaag acceeagggg aaggggegag gegaatette gegetgettt 1140
     51 ttetteeete eccetteeeg egeegggege geaggeatgg atgtgeteag ecctggteag 1200
                                                                           1204
     52 ggac
     55 <210> SEQ ID NO: 2
```

2/27/02

56 <211> LENGTH: 1938

RAW SEQUENCE LISTING DATE: 02/27/2002 PATENT APPLICATION: US/10/049,407 TIME: 13:23:41

Input Set : A:\Mwh0006.app

```
57 <212> TYPE: DNA
58 <213> ORGANISM: Homo sapiens
60 <400> SEQUENCE: 2
61 totagatatt totgggattg gagactgttt gotagtgggg agactocago tooggcagoo 60
62 agttcgggag cggcaaagta aaatggacag cgacagacag acgttccagc cacctctccg 120
63 ccgccgggag atcctggagc tgctttcagg ccaactccag tttcccagct ggagcttctg 180
64 aacgcgctgg actgcgagag ccagggagcg cctgaaagct gctcctcgga gatacccttc 240
65 gccgaagcag taagaacttc ctgcttgggt ctctgcattc ccttcctccg aaacttccca 300
66 ggagaagggc ggaagacccc aggggaaggg gcgaggcgaa tettegeget gettttett 360
67 ccctcccct tcccgcgccg ggcgcgcagg catggatgtg ctcagccctg gtcagggcaa 420
68 caacaccaca tcaccaccgg ctccctttga gaccggcggc aacactactg gtatctccga 480
69 cgtgaccgtc agctaccaag tgatcacctc tctgctgctg ggcacgctca tcttctgcgc 540
70 ggtgctgggc aatgcgtgcg tggtggctgc catcgccttg gagcgctccc tgcagaacgt 600
71 ggccaattat cttattggct ctttggcggt caccgacctc atggtgtcgg tgttggtgct 660
72 gcccatggcc gcgctgtatc aggtgctcaa caagtggaca ctgggccagg taacctgcga 720
73 cctgttcatc gccctcgacg tgctgtgctg cacctcatcc atcttgcacc tgtgcgccat 780
74 cgcgctggac aggtactggg ccatcacgga ccccatcgac tacgtgaaca agaggacgcc 840
75 ccggcgcgcc gctgcgctca tctcgctcac ttggcttatt ggcttcctca tctctatccc 900
76 gcccatgctg ggctggcgca ccccggaaga ccgctcggac cccgacgcat gcaccattag 960
77 caaggatcat ggctacacta tctattccac ctttggagct ttctacatcc cgctgctgct 1020
78 catgetggtt ctctatgggc gcatattccg agctgcgcgc ttccgcatcc gcaagacggt 1080
79 caaaaaggtg gagaagaccg gagcggacac ccgccatgga gcatctcccg ccccgcagcc 1140
80 caagaagagt gtgaatggag agtcggggag caggaactgg aggctgggcg tggagagcaa 1200
81 ggctgggggt gctctgtgcg ccaatggcgc ggtgaggcaa ggtgacgatg gcgccgccct 1260
82 ggaggtgatc gaggtgcacc gagtgggcaa ctccaaagag cacttgcctc tgcccagcga 1320
83 ggctggtcct accccttgtg cccccgcctc tttcgagagg aaaaatgagc gcaacgccga 1380
84 ggcgaagcgc aagatggccc tggcccgaga gaggaagaca gtgaagacgc tgggcatcat 1440
85 catgggcacc ttcatcctct gctggctgcc cttcttcatc gtggctcttg ttctgccctt 1500
86 ctgcgagage agctgccaca tgcccaccct gttgggcgcc ataatcaatt ggctgggcta 1560
87 ctccaactct ctgcttaacc ccgtcattta cgcatacttc aacaaggact ttcaaaacgc 1620
88 gtttaagaag atcattaagt gtaagttctg ccgccagtga tgacggagga gtagccggcc 1680
89 agtcgagget acaggatccg teccatteae tatgetteee ecaaceetag ggaatcaaca 1740
90 cttaagataa ttcgccactt ctcctctttc tctctgctcc gctcacggct tgcagacctg 1800
91 gtcccctccc cacttcctgc tccacggcag ggccctttgt gcaaaggaga cccagcggag 1860
92 gagcgttgag agcccaggaa attcagagag tttgtgagaa gcgacattgg ctcagacttc 1920
                                                                      1938
93 gcctgtatca tcagtttt
96 <210> SEQ ID NO: 3
97 <211> LENGTH: 2722
98 <212> TYPE: DNA
99 <213> ORGANISM: Homo sapiens
101 <400> SEQUENCE: 3
102 attotocotg agggagtaag gotggactgt tagatgatag oggaggtaco gttttgttgt 60
103 tgttgtcgtc gttgttcgtt tgtttttgga gacggagtct cgctctgtcg cccaggctgg 120
104 agtgcaatgg cgcgagaacg gaggtagctt tttaaaaacg aagacacact cggtcttctt 180
105 ccatcaatta gcaataattg ggagactgac ccaggactgt tcaccttccc attcaggctc 240
106 cctatgcttc cttttctcat ctcctattgc cactctggga tgctgacacg atttaagaat 300
107 ttggcagata atatgaccca aggagtagtt ggaattccct cccccaagtt tttccaaccc 360
108 cagttttgct gggttggagg cggagtttat ttgttacaac cttggtctga ccggcaggga 420
109 cctggtgtgt gtaagtgagt tctgagtctc tgttgacaaa aagagactcg aatgcaaaga 480
```

RAW SEQUENCE LISTING DATE: 02/27/2002 PATENT APPLICATION: US/10/049,407 TIME: 13:23:41

Input Set : A:\Mwh0006.app

```
110 cgctgagcta gagggagagg agggcgggga cccagaggaa agaggcactc ctcggggttg 540
111 gggaagtatt aggaggggag ggttagagtg ggagggaagg agctcgcttt cgaagcgact 600
112 cacagaggga taaataaagg gaagtgagga ggaagaggga gacttaaagg gaaggcaggt 660
113 ggggagaagg gggacgaaag aggcagaaga gagagaagag agggggagag 720
114 agggaaggaa ggaaatagcg agaggagggt cacagagtga ccgtggagga tggggcttct 780
115 cggttctaga tatttctggg attggagact gtttgctagt ggggagactc cagctccggc 840
116 agccagttcg ggagcggcaa agtaaaatgg acagcgacag acagacgttc cagccacctc 900
117 tecgeegeeg ggagateetg gagetgettt eaggeeaact eeagttteee agetggaget 960
118 totgaacgcg otggactgcg agagccaggg agcgcctgaa agctgctcct oggagatacc 1020
119 cttcgccgaa gcagtaagaa cttcctgctt gggtctctgc attcccttcc tccgaaactt 1080
120 cccaggagaa gggcggaaga ccccagggga aggggcgagg cgaatcttcg cgctgctttt 1140
121 tettecetee ceetteege geegggegeg caggeatgga tgtgeteage cetggteagg 1200
122 gcaacaacac cacatcacca coggetecet ttgagaccgg cggcaacact actggtatet 1260
123 ccgacgtgac cgtcagctac caagtgatca cctctctgct gctgggcacg ctcatcttct 1320
124 gcgcggtgct gggcaatgcg tgcgtggtgg ctgccatcgc cttggagcgc tccctgcaga 1380
125 acqtggccaa ttatcttatt ggctctttgg cggtcaccga cctcatggtg tcggtgttgg 1440
126 tgctgcccat ggccgcgctg tatcaggtgc tcaacaagtg gacactgggc caggtaacct 1500
127 gcgacctgtt catcgccctc gacgtgctgt gctgcacctc atccatcttg cacctgtgcg 1560
128 ccatcgcgct ggacaggtac tgggccatca cggaccccat cgactacgtg aacaagagga 1620
129 cgccccggcg cgccgctgcg ctcatctcgc tcacttggct tattggcttc ctcatctcta 1680
130 tecegeceat getgggetgg egeaceeegg aagacegete ggaceeegae geatgeacea 1740
131 ttagcaagga tcatggctac actatctatt ccacctttgg agctttctac atcccgctgc 1800
132 tgctcatgct ggttctctat gggcgcatat tccgagctgc gcgcttccgc atccgcaaga 1860
134 agcccaagaa gagtgtgaat ggagagtcgg ggagcaggaa ctggaggctg ggcgtggaga 1980
135 gcaaggctgg gggtgctctg tgcgccaatg gcgcggtgag gcaaggtgac gatggcgccg 2040
136 ccctggaggt gatcgaggtg caccgagtgg gcaactccaa agagcacttg cctctgccca 2100
137 gcgaggctgg tectaceeet tgtgeeeeeg eetetttega gaggaaaaat gagegeaaeg 2160
138 ccgaggcgaa gcgcaagatg gccctggccc gagagaggaa gacagtgaag acgctgggca 2220
139 tcatcatggg caccttcatc ctctgctggc tgcccttctt catcgtggct cttgttctgc 2280
140 ccttctgcga gagcagctgc cacatgccca ccctgttggg cgccataatc aattggctgg 2340
141 gctactccaa ctctctgctt aaccccgtca tttacgcata cttcaacaag gactttcaaa 2400
142 acgcgtttaa gaagatcatt aagtgtaagt tctgccgcca gtgatgacgg aggagtagcc 2460
143 ggccagtcga ggctacagga tccgtcccat tcactatgct tcccccaacc ctagggaatc 2520
144 aacacttaag ataattcgcc acttctcctc tttctctctg ctccgctcac ggcttgcaga 2580
145 cctggtcccc tccccacttc ctgctccacg gcagggccct ttgtgcaaag gagacccagc 2640
146 ggaggagcgt tgagagccca ggaaattcag agagtttgtg agaagcgaca ttggctcaga 2700
147 cttcqcctqt atcatcagtt tt
150 <210> SEQ ID NO: 4
151 <211> LENGTH: 1269
152 <212> TYPE: DNA
153 <213> ORGANISM: Homo sapiens
155 <400> SEQUENCE: 4
156 atggatgtgc tcagccctgg tcagggcaac aacaccacat caccaccggc tccctttgag 60
157 accggcggca acactactgg tatctccgac gtgaccgtca gctaccaagt gatcacctct 120
158 ctgctgctgg gcacgctcat cttctgcgcg gtgctgggca atgcgtgcgt ggtggctgcc 180
159 atcgccttgg agcgctccct gcagaacgtg gccaattatc ttattggctc tttggcggtc 240
160 accgacctca tggtgtcggt gttggtgctg cccatggccg cgctgtatca ggtgctcaac 300
161 aagtggacac tgggccaggt aacctgcgac ctgttcatcg ccctcgacgt gctgtgctgc 360
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/049,407
DATE: 02/27/2002
TIME: 13:23:41

Input Set : A:\Mwh0006.app

```
162 aceteateca tettgeacet gtgegeeate gegetggaea ggtaetggge cateaeggae 420
163 cccatcgact acgtgaacaa gaggacgccc cggcgcgccg ctgcgctcat ctcgctcact 480
164 tggcttattg gcttcctcat ctctatcccg cccatgctgg gctggcgcac cccggaagac 540
165 cgctcggacc ccgacgcatg caccattagc aaggatcatg gctacactat ctattccacc 600
166 tttggagett tetacatece getgetgete atgetggtte tetatgggeg catatteega 660
167 gctgcgcgct tccgcatccg caagacggtc aaaaaggtgg agaagaccgg agcggacacc 720
168 egecatggag cateteeege eeegcageee aagaagagtg tgaatggaga gteggggage 780
169 aggaactgga ggctgggcgt ggagagcaag gctgggggtg ctctgtgcgc caatggcgcg 840
170 gtgaggcaag gtgacgatgg cgccgccctg gaggtgatcg aggtgcaccg agtgggcaac 900
171 tecaaagage acttgeetet geecagegag getggteeta eecettgtge eecegeetet 960
172 ttcqaqaqqa aaaatqaqcq caacqccqaq qcqaaqcqca aqatqqccct qqcccqaqaq 1020
173 aggaagacag tgaagacqct gggcatcatc atgggcacct tcatcctctg ctggctgccc 1080
174 ttcttcatcq tqqctcttqt tctqcccttc tqcqaqaqca qctqccacat gcccaccctg 1140
175 ttgggcgcca taatcaattg gctgggctac tccaactctc tgcttaaccc cgtcatttac 1200
176 gcatacttca acaaggactt tcaaaacgcg tttaagaaga tcattaagtg taagttctgc 1260
177 cgccagtga
                                                                       1269
180 <210> SEQ ID NO: 5
181 <211> LENGTH: 422
182 <212> TYPE: PRT
183 <213> ORGANISM: Homo sapiens
185 <400> SEQUENCE: 5
186 Met Asp Val Leu Ser Pro Gly Gln Gly Asn Asn Thr Thr Ser Pro Pro
                                         10
189 Ala Pro Phe Glu Thr Gly Gly Asn Thr Thr Gly Ile Ser Asp Val Thr
                 20
                                     25
192 Val Ser Tyr Gln Val Ile Thr Ser Leu Leu Gly Thr Leu Ile Phe
             35
195 Cys Ala Val Leu Gly Asn Ala Cys Val Val Ala Ala Ile Ala Leu Glu
         50
                             55
198 Arg Ser Leu Gln Asn Val Ala Asn Tyr Leu Ile Gly Ser Leu Ala Val
                         70
201 Thr Asp Leu Met Val Ser Val Leu Val Leu Pro Met Ala Ala Leu Tyr
                     85
                                         90
204 Gln Val Leu Asn Lys Trp Thr Leu Gly Gln Val Thr Cys Asp Leu Phe
                100
                                    105
207 Ile Ala Leu Asp Val Leu Cys Cys Thr Ser Ser Ile Leu His Leu Cys
           115
                                120
210 Ala Ile Ala Leu Asp Arg Tyr Trp Ala Ile Thr Asp Pro Ile Asp Tyr
                            135
       130
                                                140
213 Val Asn Lys Arg Thr Pro Arg Arg Ala Ala Ala Leu Ile Ser Leu Thr
                        150
                                            155
216 Trp Leu Ile Gly Phe Leu Ile Ser Ile Pro Pro Met Leu Gly Trp Arg
                    165
                                        170
219 Thr Pro Glu Asp Arg Ser Asp Pro Asp Ala Cys Thr Ile Ser Lys Asp
220
                                    185
                                                        190
               180
222 His Gly Tyr Thr Ile Tyr Ser Thr Phe Gly Ala Phe Tyr Ile Pro Leu
           195
                                200
225 Leu Leu Met Leu Val Leu Tyr Gly Arg Ile Phe Arg Ala Ala Arg Phe
226
       210
                            215
                                                220
```

RAW SEQUENCE LISTING DATE: 02/27/2002 PATENT APPLICATION: US/10/049,407 TIME: 13:23:41

Input Set : A:\Mwh0006.app

```
228 Arg Ile Arg Lys Thr Val Lys Lys Val Glu Lys Thr Gly Ala Asp Thr
229 225
                        230
                                             235
231 Arg His Gly Ala Ser Pro Ala Pro Gln Pro Lys Lys Ser Val Asn Gly
                    245
                                        250
234 Glu Ser Gly Ser Arg Asn Trp Arg Leu Gly Val Glu Ser Lys Ala Gly
                260
                                    265
237 Gly Ala Leu Cys Ala Asn Gly Ala Val Arg Gln Gly Asp Asp Gly Ala
            275
                                280
240 Ala Leu Glu Val Ile Glu Val His Arg Val Gly Asn Ser Lys Glu His
                            295
243 Leu Pro Leu Pro Ser Glu Ala Gly Pro Thr Pro Cys Ala Pro Ala Ser
                                             315
                        310
246 Phe Glu Arg Lys Asn Glu Arg Asn Ala Glu Ala Lys Arg Lys Met Ala
                    325
                                         330
249 Leu Ala Arg Glu Arg Lys Thr Val Lys Thr Leu Gly Ile Ile Met Gly
                                    345
252 Thr Phe Ile Leu Cys Trp Leu Pro Phe Phe Ile Val Ala Leu Val Leu
                                360
        355
255 Pro Phe Cys Glu Ser Ser Cys His Met Pro Thr Leu Leu Gly Ala Ile
        370
                            375
                                                 380
258 Ile Asn Trp Leu Gly Tyr Ser Asn Ser Leu Leu Asn Pro Val Ile Tyr
                        390
                                            395
261 Ala Tyr Phe Asn Lys Asp Phe Gln Asn Ala Phe Lys Lys Ile Ile Lys
                    405
                                        410
264 Cys Lys Phe Cys Arg Gln
265
                420
268 <210> SEQ ID NO: 6
269 <211> LENGTH: 15
270 <212> TYPE: DNA
271 <213> ORGANISM: Homo sapiens
273 <400> SEQUENCE: 6
                                                                       15
274 ggagcgcctg aaagc
277 <210> SEQ ID NO: 7
278 <211> LENGTH: 15
279 <212> TYPE: DNA
280 <213> ORGANISM: Homo sapiens
282 <400> SEQUENCE: 7
                                                                       15
283 ggagcgcttg aaagc
286 <210> SEQ ID NO: 8
287 <211> LENGTH: 15
288 <212> TYPE: DNA
289 <213> ORGANISM: Homo sapiens
291 <400> SEQUENCE: 8
292 cggaccccat cgact
                                                                       15
295 <210> SEQ ID NO: 9
296 <211> LENGTH: 15
297 <212> TYPE: DNA
298 <213> ORGANISM: Homo sapiens
300 <400> SEQUENCE: 9
```

VERIFICATION SUMMARY

DATE: 02/27/2002

PATENT APPLICATION: US/10/049,407

TIME: 13:23:42

Input Set : A:\Mwh0006.app

Output Set: N:\CRF3\02272002\J049407.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number